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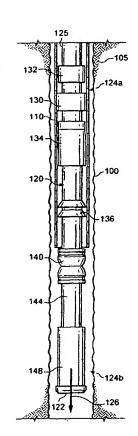
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(54) Title: MONO DIAMETER WELLBORE CASING



(57) Abstract: An apparatus (120) and system for radially expanding and plastically deforming an expandable tubular member (110) where the system comprises an anchoring mechanism (148) adapted to mate with an end of the expandable tubular member (110), a tubular member (125) releasable coupled to the anchoring mechanism (148) \, an adjustable expansion mandrel (140), and an actuator (134) coupled to the adjustable expansion mandrel (140) to controllably longitudinally displace the adjustable expansion mandrel (140) relative to the expandable tubular member (110). The expansion mandrel (140) is controllably expanded to a larger diameter for radial expansion of the expandable tubular mandrel (110) or collapsed to a smaller outside diameter.

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A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : E21B 29/00 US CL : 166/384 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S.: 166/277,381,382,384,386,387,297,55,206,207,212,216,217,242.2					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet					
C. DOC	C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.		
Y	US 6,012,523 A (Campbell et al.) 11 January 2000	(11.01.2000), columns 3 and 4.	1-3,7-12		
Y	US 4,848,459 A (Blackwell et al.) 18 July 1989 (18.07.1989), see Figure 1.		1-3,7-12		
A	US 6,112,818 A (Campbell et la.) 05 September 2000 (05.09.2000), see Abstract.		1-12		
A, P	US 6,425,444 B1 (Metcalfe et al.) 30 July 2002 (30.07.2002), see Abstract.		1-12		
A, P	US 6,631,765 B2 (Baugh et al.) 14 October 2003 (14.10.2003), see Abstract.		1-12		
A	US 3,785,193 A (Kinley et al.) 15 January 1974 (15.01.1974), see Abstract.		1-12		
A	US 6,021,850 A (Wood et al.) 08 February 2000 (08.02.2000), see Abstract.		1-12		
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